IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) An optical modulator comprising:

a Z-cut lithium niobate substrate on which is formed a Mach-Zehnder interferometer having two generally parallel waveguides lying beneath a buffer layer of dielectric material, and a first ground electrode, ~~and~~ a second ground electrode[[s]] and a hot electrode disposed on the buffer layer, the first and second ground electrodes being spaced on either side of the hot electrode, the hot electrode and the first ground electrode being proximate to at least a part of the respective waveguides and the first ground electrode having a width approximately equal to the width of the respective waveguide, characterized by an asymmetrical electrode structure in which ~~: (a)~~ the hot electrode and the first ground electrode each have a width substantially less than that of the second ground electrode. ~~; and/or~~

~~(b) the spacing between the first ground and hot electrodes is different from the spacing between the second ground and hot electrodes.~~

2. (Currently Amended) The optical modulator according to claim 1, wherein the hot electrode has a width ~~and the first ground electrode have widths~~ approximately equal to the width[[s]] of the respective waveguide[[s]] ~~beneath them~~.

3. (Previously Presented) The optical modulator according to claim 1, wherein the hot electrode and the first ground electrode have substantially equal widths.

4. (Previously Presented) The optical modulator according to claim 1, wherein the hot electrode and the first ground electrode each have a width less than that of the second ground electrode and not exceeding 15 μm.

5. (Previously Presented) The optical modulator according to claim 4 in which the spacing between the first ground and hot electrodes is smaller than the spacing between the second ground and hot electrodes.

6. (Previously Presented) The optical modulator according to claim 1 wherein the second ground electrode has a width at least five times greater than that of the hot electrode.

7. (Previously Presented) The optical modulator according to claim 1, wherein the second ground electrode has a width at least ten times greater than that of the hot electrode.

8. (Previously Presented) The optical modulator according to claim 1, wherein the spacing between the first ground and hot electrodes is between 10 and 30 μm and the spacing between the second ground and hot electrodes is greater and between 20 and 80 μm.

9. (Previously Presented) The optical modulator according to claim 1, wherein the dielectric material comprises silicon dioxide with a thickness between 0.4 and 1.5μm.

10. (Previously Presented) The optical modulator according to claim 1, wherein the electrodes comprise gold having a thickness between 15 and 50 μm.

Please add the following new claims:

11. (New) An optical modulator comprising a Z-cut lithium niobate substrate on which is formed a Mach-Zehnder interferometer having two generally parallel waveguides lying beneath a buffer layer of dielectric material, and a first ground electrode, a second ground electrode, and a hot electrode disposed on the buffer layer, the first and second ground electrodes being spaced on either side of the hot electrode such that the spacing between the first ground electrode and the hot electrode is different from the spacing between the second ground electrode and the hot electrode, wherein the hot electrode and the first ground electrode is positioned proximate to at least a part of the respective waveguides.

12. (New) The optical modulator according to claim 11, wherein the spacing between the first ground and hot electrodes is between 10 and 30 μm and the spacing between the second ground and hot electrodes is greater and between 20 and 80 μm.

13. (New) An optical modulator comprising a Z-cut lithium niobate substrate on which is formed a Mach-Zehnder interferometer having two generally parallel waveguides lying beneath a buffer layer of dielectric material, and a first ground electrode, a second ground electrode, and a hot electrode disposed on the buffer layer, the first and second ground electrodes being spaced on either side of the hot electrode, the hot electrode and the first ground electrode being proximate to at least a part of the respective waveguides, wherein the hot electrode and the first ground electrode each have a width substantially less than that of the second ground electrode and wherein the spacing between the first ground and hot electrodes is different from the spacing between the second ground and hot electrodes.

14. (New) The optical modulator according to claim 13, wherein the second ground electrode has a width at least five times greater than that of the hot electrode.

15. (New) The optical modulator according to claim 13, wherein the second ground electrode has a width at least ten times greater than that of the hot electrode.

16. (New) The optical modulator according to claim 13, wherein the hot electrode and the first ground electrode each have a width less than that of the second ground electrode and not exceeding 15 μm.

17. (New) The optical modulator according to claim 16, in which the spacing between the first ground and hot electrodes is smaller than the spacing between the second ground and hot electrodes.

18. (New) The optical modulator according to claim 13, wherein the hot electrode and the first ground electrode have widths approximately equal to the widths of the respective waveguides.

19. (New) The optical modulator according to claim 13, wherein the hot electrode and the first ground electrode have substantially equal widths.